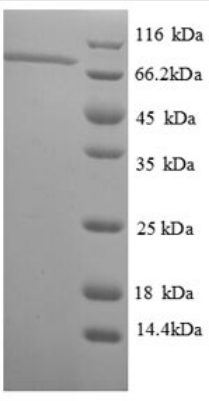
Thermus Aquacicus DNA Polymerase I, Thermostable (pol1) Recombinant Protein

PRODUCT OVERVIEW

Product Name	Thermus aquacicus DNA polymerase I, thermostable (pol1), Recombinant Protein
Full Product Name	Recombinant thermus aquacicus DNA polymerase I, thermostable
Product Gene Name	pol1 recombinant protein
Product Synonym Gene Name	polA
Product Synonym Names	Taq polymerase 1
Sequence	TGRLSSSDPN LQNIPVRTPL GQRIRRAFIA EEGWLLVALD YSQIELRVLA HLSGDENLIR VFQEGRDIHT ETASWMFGVP REAVDPLMRR AAKTINFGVL YGMSAHRLSQ ELAIPYEEAQ AFIERYFQSF PKVRAWIEKT LEEGRRRGYV ETLFGRRRYV PDLEARVKSV REAAERMAFN MPVQGTAADL MKLAMVKLFP RLEEMGARML LQVHDELVLE APKERAEAVA RLAKEVMEGV YPLAVPLEVE VGIGEDWLSA KE
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Liquid or Lyophilized powder If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8
Purity/Purification	Greater than 90% as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.
Molecular Weight	56.9 kDa
Sequence Positions	571-832aa; Partial
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
3D Structure	ModBase 3D Structure for P19821
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for pol1 recombinant protein	MBS1265191 is a recombinant protein targeting pol1. Also known as Recombinant thermus aquacicus DNA polymerase I, thermostable. Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Product References and Citations for pol1 recombinant protein	Isolation, characterization, and expression in Escherichia coli of the DNA polymerase gene from Thermus aquaticus.Lawyer F.C., Stoffel S., Saiki R.K., Myambo K., Drummond R., Gelfand D.H.J. Biol. Chem. 264:6427-6437(1989) Overproduction of Thermus aquaticus DNA polymerase and its structural analysis by ion-spray mass spectrometry.Ishino Y., Ueno T., Miyagi M., Uemori T., Imamura M., Tsunasawa S., Kato I.J. Biochem. 116:1019-1024(1994) Crystal structure of Thermus aquaticus DNA polymerase.Kim Y., Eom S.H., Wang J., Lee D.-S., Suh S.W., Steitz T.A.Nature 376:612-616(1995) Crystal structure of the large fragment of Thermus aquaticus DNA polymerase I at 2.5-A resolution structural basis for thermostability.Korolev S., Nayal M., Barnes W.M., di Cera E., Waksman G.Proc. Natl. Acad. Sci. U.S.A. 92:9264-9268(1995) Structure of Taq polymerase with DNA at the polymerase active site.Eom S.H., Wang J., Steitz T.A.Nature 382:278-281(1996) Crystal structures of open and closed forms of binary and ternary complexes of the large fragment of Thermus aquaticus DNA polymerase I structural basis for nucleotide incorporation.Li Y., Korolev S., Waksman G.EMBO J. 17:7514-7525(1998) Crystal structures of the Klenow fragment of Thermus aquaticus DNA polymerase I complexed with deoxyribonucleoside triphosphates.Li Y., Kong Y., Korolev S., Waksman G.Protein Sci. 7:1116-1123(1998) Structure-based design of Taq DNA polymerases with improved properties of dideoxynucleotide incorporation.Li Y., Mitaxov V., Waksman G.Proc. Natl. Acad. Sci. U.S.A. 96:9491-9496(1999)

Other Notes	Small volumes of pol1 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



SDS-PAGE of pol1 recombinant protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for pol1. It may not necessarily be applicable to this product.

NCBI GI #	118828
NCBI Accession #	P19821.1
UniProt Primary Accession #	P19821
NCBI Official Full Name	DNA polymerase I, thermostable
UniProt Protein Name	DNA polymerase I, thermostable
UniProt Synonym Protein Names	Taq polymerase 1
Protein Family	DNA polymerase
UniProt Gene Name	polA
UniProt Synonym Gene Names	pol1
UniProt Entry Name	DPO1_THEAQ
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